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ABSTRACT 176

Title: The Prevalence and Determinants of Left Ventricular Hypertrophy amongst Elderly Hypertensive in an Asian multi-ethnic population.

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Background Abstract:

Hypertension with its concomitant risks of cardiovascular and kidney disease is an important public health problem worldwide. Left ventricular hypertrophy (LVH) diagnosed on echocardiogram has high prognostic value on the cardiovascular mortality and morbidity. However echocardiogram test is not done routinely in the Malaysian primary care setting to detect the presence of LVH in hypertension because of limited resources. Early diagnosis followed by adequate treatment is essential to prevent both cerebro-vascular morbidity and mortality. Angiotensin Receptor Blocker was shown to reduce LVH and the incident of stroke in the LIFE study.

Objectives: This study aims to determine the prevalence of LVH and its associated risk factors in a multiethnic population aged ≥ 60 years.

Methods: This was a sub-analysis of a cross-sectional study of 359 patients with hypertension conducted from June to September 2009. Patients aged ≥ 60 years, with known hypertension were recruited. Socio-demographic data, weight, height, medication use, the average of blood pressure reading of systolic blood pressure and diastolic blood pressure were collected. All patients underwent an echocardiogram examination.

Results: Of 359 patients, 199 patients were analyzed. Two fifth of the 199 respondents had diabetes. The mean age was 64.7 (SD ± 2.9) years and the duration of hypertension was 10.4(SD ± 7.7) years. A total of 44.7% of the respondents reached target blood pressure (BP $<140/90$ mmHg for hypertensive alone and $< 130/80$ mmHg for diabetics). The prevalence of left ventricular hypertrophy was 23.6 %. Using logistic regression, the determinants of LVH are diabetes (odds ratio= 2.56 confidence interval 1.281, 5.090) and diastolic blood pressure (odds ratio= 1.05 confidence interval 1.006, 1.105).

Conclusions: Prevalence of LVH is high amongst the elderly hypertensive population in a primary care clinic. Guidelines for enhancing the use of echocardiogram in detecting left ventricular hypertrophy amongst elderly hypertensive may be needed and needs further deliberations.

(299 words)